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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,168	02/13/2004	Ching-Fuh Lin	MR1035-1386	4472
4586	7590	11/24/2004	EXAMINER	
ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			KOVAL, MELISSA J	
			ART UNIT	PAPER NUMBER
			2851	
DATE MAILED: 11/24/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/777,168

Applicant(s)

LIN ET AL.

Examiner

Melissa J Koval

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters; prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23 is/are rejected.
- 7) ☒ Claim(s) 1-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 1, 2, 16 and 19 are objected to because of the following informalities:

In claim 1, line 12, the limitation "first optical film layer" is not clearly supported by the specification and the examiner suggests changing it to - - first film coating - -.

In claim 2, line 14, the limitation "second optical film layer" is not clearly supported by the specification and the examiner suggests changing it to - - second film coating - -.

In claim 16, line 4, the limitation "film thicknesses" is not clearly supported by the specification and the examiner suggests changing it to - - film structures - -.

In claim 19, the limitation "said mirrors" lacks proper antecedent basis. In the final line after "light valves," the following additional language is suggested: - - each of said first and second dichroic beamsplitters/combiners defining a mirror. - -

In claim 20, the limitation "said mirrors" lacks proper antecedent basis. In the final line after "light valves," the following additional language is suggested: - - each of said first and second dichroic beamsplitters/combiners defining a mirror. - -

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 23 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hatanaka et al. (U.S. Patent 5,451,103).

See Figure 10 of Hatanaka et al. '103, for example.

Claim 23 sets forth: "A reflective type light valve projection device comprising (See column 1, lines 42 through 44, of '103.):

an incident light source for providing an incident light (light source 1);

a first dichroic beam splitter/combiner located on the optical path of said incident light for reflecting a first primary color to separate said first primary color from a second and a third primary colors (See first dichroic mirror 4A for reflecting only red light. Also see column 1, lines 51 and 52.);

a second dichroic beam splitter/combiner located on the optical path of said incident light for separating the second and third primary colors passing through said first dichroic beam splitter/combiner (See second dichroic mirror 4B for reflecting only blue light and passing green light. Also see column 1, lines 54 through 58.);

three light valves including a first light valve (first liquid crystal plate 5A), a second light valve (second liquid crystal plate 5C) and a third light valve (third liquid crystal plate 5B) and used as image modulating devices, said three light valves respectively modulating and reflecting the three primary colors separated by said first and second dichroic beam splitters/combiners to let said first and second dichroic beam splitters/combiners collect the modulated and reflected first and second primary colors (See column 1, lines 59 through 66.); and

a projecting lens (optical lens system 6) for collecting the three primary colors reflected and transmitted by said first and second dichroic beam splitters/combiners after modulation to project out a full-color image (See column 2, lines 1 through 3.), wherein said first light valve and said third light valve are symmetrically arranged with said first dichroic beam splitter/combiner as the reference plane, and said third light valve and said second light valve are symmetrically arranged with said second dichroic beam splitter/combiner as the reference plane.”

It can be clearly seen in Figure 10 that first liquid crystal plate 5A and third liquid crystal plate 5B are symmetrically arranged around dichroic mirror 4A, and that second liquid crystal plate 5C and third liquid crystal plate 5B are symmetrically arranged around dichroic mirror 4B.

Allowable Subject Matter

Claims 1-22 would be allowable if rewritten or amended to overcome the objection(s) set forth in this Office action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa J Koval whose telephone number is (571) 272-2121. The examiner can normally be reached on Monday through Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJK


JUDY NGUYEN
PRIMARY EXAMINER